

**TECHNICAL SUPPORT DOCUMENT
FOR PREVENTION OF SIGNIFICANT DETERIORATION
PSD 97-01, AMENDMENT 4**

**North Pacific Paper Company, LLC
Cowlitz County, Washington**

Request for Administrative Change

Prepared by

**Air Quality Program
Washington Department of Ecology
Olympia, Washington**

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1. EXECUTIVE SUMMARY

Ecology received a request from North Pacific Paper Company in November 2016 to change their Prevention of Significant Deterioration (PSD) permit. The requested changes are:

- Replace the permittee (and owner) to North Pacific Paper Company from Weyerhaeuser NORPAC.
- Add the 2012–2013 and 2015 test results.

Ecology considered the application to be complete in December 2016.

2. CHANGE OF OWNERSHIP

NORPAC is located on the same site as Weyerhaeuser NR Company's Kraft Pulping, Liquid Packaging and iLevel Lumber Manufacturing, and shared a common Title V Air Operating Permit with those operations.

On November 1, 2016, NORPAC was sold to One Rock Capital Partners, LLC. The facility operates under the name Paper North Pacific Company, LLC. One Rock Capital Partners, LLC has no affiliation with Weyerhaeuser NR Company.

The facility will have its own Title V Air Operating Permit due to the ownership change and will assume compliance responsibility with the air quality control requirements independently.

3. ADDITIONAL "FINDINGS" IN THE PERMIT TO REFLECT 2012–2013 AND 2015 TEST RESULTS

Permit No. PSD 97-01, Amendment 3 establishes the following emissions limits for NORPAC I and II units:

- VOC emissions shall not exceed 2,007 pounds per day, averaged over 30 consecutive days.
- VOC emissions shall not exceed 311.0 tons per year, averaged over any consecutive 12-month period.
- CO emission shall not exceed 307.6 tons per year, averaged over any consecutive 12-month period.

Compliance with the limits described above are determined based on the emission factors in Tables 1 and 2 of the permit, and the production rate of NORPAC I and II. The permit also requires periodic source testings for VOC and CO to verify the reasonableness of emission factors. If the source testing results indicate emission factor changes more than +/- 20 percent

from the 2008–2009 emission factors, either Ecology or Paper North Pacific Company, LLC can initiate an action to adjust the emission factors in the PSD permit.

Several source tests were conducted during 2012–2013, which showed higher than expected results compared to the emission factors in Tables 1 and 2 of the permit. In February 2015, NORPAC submitted a permit application to revise the emission factors in the PSD permit. After further discussion at that time, Ecology agreed to place the application on hold pending the results of 2015 source testing. The 2015 source tests showed emissions comparable to the emission factors in Tables 1 and 2 of the permit. Therefore, the emission factors in Tables 1 and 2 of the permit are still representative and will not be revised. Along with this request, the applicant also formally withdrew the permit amendment application submitted during 2015.

Tables below show the comparison of the emission factors in the permit, the 2012–2013 and the 2015 test results.

TMP Mill:	Carbon Monoxide Emission Factor (lb CO/BDMT)		
	PSD 97-01 Amendment 3	2012 Test Results	2015 Test Results
High Brightness, Reboiler Up	0.805	0.720 0.652	0.805
High Brightness, Reboiler Down	0.805	0.499	0.587

Volatile Organic Compound Emission Factors (lb C/BDMT)			
TMP Mill:	PSD 97-01, Amendment 3	2012-13 Test Results	2015 Test Results
High Brightness, Reboiler Up	0.340	0.876 0.712 0.895	0.265
High Brightness, Reboiler Down	0.319	0.742	0.787
Pressure Relief Valves (PRVs)	0.124	0.314	0.320
Paper Machines:	Emission Factors (lb C/ADMT)		
High Brightness	0.457	0.770	0.496

The applicant provided the annual VOC emission rate summary as shown in Table 3 below. Overall, the annual VOC emission rate based on 2015 emission factors shown an increase of three percent compared to the permit factor. The increase is within the 20 percent margin for the purpose of evaluating the reasonableness of emission factors. Ecology concurs with the applicant that the results show no significant deviation and the factors do not need to be revised at this point.

Table 3. VOC Emission Changes Compared to PSD Permit 97-01, Amendment 3

Emission Source	Maximum Production Rate ^a	Permit Factors PSD 97-01, v3	2015 VOC Test Result	Maximum VOC Emissions (tpy)	
				Permit Factors	2015 Factors
TMP#1 - Reboiler Up	359,510 BDMT/yr	0.34 lb/BDMT	0.265 lb/BDMT	61.1	47.6
TMP#1 - Reboiler Down	14,980 BDMT/yr	0.34 ^b lb/BDMT	0.787 lb/BDMT	2.5	5.9
TMP#2 - Reboiler Up	359,510 BDMT/yr	0.34 lb/BDMT	0.265 lb/BDMT	61.1	47.6
TMP#2 - Reboiler Down	14,980 BDMT/yr	0.34 ^b lb/BDMT	0.787 lb/BDMT	2.5	5.9
TMP PRVs B&C ^c	149,796 BDMT/yr	0.124 lb/BDMT	0.32 lb/BDMT	9.3	24.0
TMP Total				136.6	130.9
PM1	346,750 ADMT/yr	0.457 lb/ADMT	0.496 lb/ADMT	79.2	86.0
PM2	416,100 ADMT/yr	0.457 lb/ADMT	0.496 lb/ADMT	95.1	103.2
PM Total				174.3	189.2
Total				310.9	320.1

- a. The maximum production rate for the TMP Mills matches the total production rate obtained from PSD permit 97-01, Amendment 3, Table 1. The production rate during reboiler downtime is 4% of the total production. The production rates for PM1 and PM2 are obtained from PSD permit 97-01, Amendment 3, Table 1.
- b. The emission factor for TMP during reboiler downtime is 0.319 lb/BDMT per Table 1 of PSD permit 97-01, Amendment 3. However, the VOC emission limit is calculated using the TMP emission factor during reboiler uptime (0.34 lb/BDMT) which is higher. Therefore, 0.34 lb/BDMT factor is listed under the column Permit Factors, PSD 97-01, v3 to be consistent with the permit limit calculation methodology.
- c. It is conservatively assumed that the emission factor tested for PRVs B&C open during reboiler downtime is representative of emissions from the PRVs despite the reboiler status.

4. CONCLUSION

Ecology concludes that the requested changes made to the permit do not authorize any changes in any emission units or result in any changes to emissions. There is also no change to the permit's approval conditions. Therefore, the changes to the PSD permit are determined to be administrative in nature.

For this reason, Ecology is issuing the amended PSD permit as an administrative amendment, which is not subject to public notice and review requirements.

For additional information, please contact:

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